CLAIMS

1. A method of manufacturing a reinforcement comprising adjacent sections of reinforcement wire embedded in an elastomer matrix, a method in which:

- a reception surface on a support is covered with the said elastomeric matrix;
- an assembly comprising a rotary distributor and a member conveying to the distributor is presented in front of the reception surface of the support, the conveying member comprising a final tubular portion substantially perpendicular to the rotation axis of the rotary distributor, the distributor comprising at least one deflector, the deflector forming a corridor receiving the wire on the radially internal side and forming a guide at the exit from the deflector on the radially external side, a space being provided, in the radial direction, between the rotary distributor and the final tubular portion of the conveying member, the presentation being made so that the reception surface is close to the guidance path at the exit from the deflector when the rotary distributor is rotated, and so that the rotation axis of the rotary distributor forms an angle perpendicular to the deposition angle required for the sections on the support;
- the rotary distributor is driven in rotation, at a controlled rotation speed;
- the reception surface is made to travel with respect to the rotary distributor;
- the wire is introduced, at a controlled linear speed, into the conveying member, threading it into the tubular portion;
- a knife is made to act in the space between the tubular portion and the distributor, so that the knife makes it possible to take off a section of wire, the said section being guided as far as and deposited on the reception surface by the said at least one deflector.

2. Method according to claim 1, in which the rotation axis of the rotary distributor is positioned outside and facing the reception surface.

3. Method according to claim 2, in which the reception surface is a surface of revolution.

4. Method according to claim 1, in which the deflector is an elbowed tube.

5. Method according to claim 1, in which the conveying member and the distributor are coupled and both rotary, the knife being kept immobile during the cutting.

6. Method according to claim 1, in which the blade takes off a section of wire at each turn of the rotary distributor.

7. Method according to either of claims 3 to 6, used for manufacturing a reinforcement during the manufacture of a tyre constructed progressively on the said support, the latter being mounted so as to rotate about an axis, stacking the various constituents of the tyre in order and in the place required by the architecture of the said tyre.

8. Method according to claim 7, used for manufacturing a reinforcement situated in a sidewall of the tyre.

9. Method according to claim 7, used for manufacturing a reinforcement situated in a bead of the tyre.

10. Method according to either of claims 7 to 9, in which the support is substantially toroidal in form, with a shape similar to the internal cavity of the tyre.

11. Method according to either of claims 1 to 10, characterised in that the length of the sections is adjusted by appropriately adapting the linear speed imparted to the wire.

12. Device for manufacturing a reinforcement based on sections of reinforcement wire intended to be deposited on a reception surface, the device comprising:

- a rotary distributor (6) in rotation about a rotation axis (R), the rotary distributor comprising at least one deflector, the deflector forming a corridor receiving the wire on the radially internal side and forming a guidance at the exit on the radially external side;
- a member conveying to the distributor, comprising a final tubular portion (53) substantially perpendicular to the rotation axis (R) of the rotary distributor, a space in the radial direction being provided between the final tubular portion (53) and the rotary distributor;

- a knife (7) disposed in the space between the rotary distributor and the conveying member.

13. Device according to claim 12, in which the conveying member and the distributor are coupled and both rotary, the knife (7) being mounted on a rotary knife holder (70) for purposes of adjustment, and whose rotation can be locked during cutting.

14. Device according to claim 12 or 13, in which the deflector is an elbowed tube (61).

15. Device according to either of claims 12 or 13, in which the rotary distributor comprises a central tube (51), an inlet orifice (52) of which is disposed substantially on the rotation axis (R) of the rotary distributor, the tubular portion (53) coming in line with the central tube (51).

16. Device according to either of claims 12 to 15, comprising an applicator fixed to the rotary distributor (6).

17. Device according to claim 16, in which the applicator is mounted at the end of an arm (63), itself articulated on a fork joint (65) fixed to the rotary distributor.

18. Device according to claim 16 or 17, in which the applicator is a rotary roller (63).

19. Device according to either of claims 16 to 17, in which a spring (66) tends to move the applicator away from the rotor (50).

20. Device according to claim 15, in which the central tube (51) is provided inside a rotary disc (50), in rotation about the rotation axis (R).

21. Apparatus for manufacturing a reinforcement for tyres, the said apparatus being intended to manufacture a reinforcement formed from a wire (P), delivered continuously and on demand by a suitable feed, the said apparatus comprising:

- a frame;
- a core (2) of revolution constituting the support on which the said reinforcement is progressively constructed by depositing sections of the said wire;

- a device according to claim 12;
- a manipulator for presenting to the core of the device, the said structure being mounted on the said member;
- means for rotationally driving the central part of the device at a controlled rotation speed;
- a member for driving the wire capable of imparting to the wire a linear advance at a controlled speed;
- means for driving the core in rotation at a controlled rotation speed.

22. Apparatus according to claim 20, in which the rotation axis of the rotary distributor is positioned outside and facing the reception surface on the core.